

6/12/8

- 1 -

DESCRIPTION

CONTENTS FILE PLAY BACK PERMISSION METHOD, AND
RECORDING MEDIUM HAVING RECORDED PLAY BACK
SOFTWARE FOR PLAYING BACK CONTENTS FILE

Technical Field

The present invention relates to a method of permitting the play back of a contents file down loaded from a server to a terminal computer and to a recording medium having recorded play back software for playing back the contents file.

Background Art

There are available audio data files of, for example, a WAV format and a MP3 format as contents files. To enjoy music by playing back an audio data file, play back software for playing back the audio data file is necessary separately. That is, when it is desired to enjoy contents files by playing back them, it is necessary to install play back software according to each type of contents files on a computer and then to get a favorite contents file and to play back it by the play back software.

When play back software is installed on a computer once, it can be used as it is for a long period of time in many cases even if an upgraded version of the software is released. In contrast, while a user may have only one contents file, when the

- 2 -

user plays back it repeatedly, he or she gets tired of it. To cope with this problem, suppliers of contents files create many types of contents files so that operators of terminal computers, who are users of contents files, select favorite contents files from the many contents files and sequentially store them in their terminal computers.

In particular, with the recent rapid popularization of communication executed through the Internet communication network, many users access servers, in which contents files are stored, from terminal computers through the Internet communication network and download contents files stored therein to the terminal computers.

The contents files include pay contents files and free contents files. However, when a contents file is downloaded once from a server to a terminal computer, it is possible to copy the contents file from the terminal computer to which it was downloaded to other terminal computer and to play back the copied contents file through play back software installed on the other terminal computer. Since the contents files are protected by a copy right, it is not preferable that the contents files be copied without any restriction in the circumstances where the creators of the contents files have nothing to do therewith, even if they are free contents files. Further, it is also not preferable to permit the unauthorized copies of the pay contents files because the users of them are treated unequally thereby in money.

In view of the above problems, it is an object of the present invention to provide a contents file play back permission method of preventing contents files from being copied without permission and from being played back by unspecified terminal computers and to provide a recording medium having recorded play back software for playing back the contents files.

Disclosure of the Invention

To solve the above problems, in a contents file play back permission method according to the present invention that permits a contents file, which has been down loaded from a server to a terminal computer connected to the server through a communication network, to be played back by the play back software installed on the terminal computer, the contents file play back permission method is characterized in that both the play back software and the contents file can incorporate client IDs; the play back software is set such that it permits the play back of the contents file only when the client ID thereof agrees with the client ID incorporated in the contents file; when profile data is transmitted from the terminal computer to the server at the time the play back software is set up, the server transmits a client ID inherent to each play back software to the terminal computer through the communication network so that the client ID is incorporated in the play back software; and, thereafter, when the terminal computer accesses the server, down loads the contents file and stores it

- 4 -

therein, the server incorporates the client ID of the destination, to which the contents file is down loaded, in the contents file.

To connect the terminal computer to the server after the play back software has been installed thereon, the play back software is set such that it acquires the client ID and incorporates it therein. When the play back software is set up to acquire the client ID, profile data as to the operator of the terminal computer is stored in the server in relation to the client ID. In contrast, when the terminal computer down loads and stores the contents file thereafter, the client ID is incorporated in the contents file, and the contents file is stored in the terminal computer in the state in which the client ID is incorporated in the contents file. The play back software is set such that it permits the play back of the contents file only when the client ID thereof agrees with the client ID incorporated in the contents file. Thus, even if the contents file is copied in other terminal computer, the other terminal computer cannot play back the copied contents file because the client ID incorporated in the play back software thereof does not agree with the client ID incorporated in the copied contents file. As a result, the down loaded contents file can be prevented from being copied without permission.

Note that when the terminal computer accesses the server to down load a contents file, if the server acquires the client ID incorporated in the play back software of the terminal computer having accessed it, it is possible for the server to provide such

Incidentally, in the case of pay contents files, it is necessary that pay members as well as operators who paid a fee only can download the pay contents files. It cannot be discriminated from the client ID given to playback software whether or not a user is any one of a pay member and a user who paid a fee. It can be discriminated from an user ID whether or not the user is the pay member, and the like. Accordingly, both playback software and a contents file can incorporate user IDs, in addition to the client IDs, and it is sufficient for the playback software to be set such that it permits the playback of a contents file only when the client ID and user ID thereof agree with the client ID and user ID of the contents file.

When the user ID is used together with the client ID, it is possible to cause a relatively large contents file to be securely stored in terminal computers and then to permit the play back of the contents file in such a manner that a contents file, in which no user ID is incorporated, is distributed as, for example, a CD ROM or the like or is down loaded and then only the pay members are permitted to incorporate their user IDs in the contents file.

Further, in a recording medium according to the present invention that has recorded play back software installed on a terminal computer connected to a server through a communication network and which plays back a contents file down loaded from the server, the recording medium is characterized in that the play back software incorporates a client ID previously transmitted from the server therein; when the contents file is down loaded, the play back software incorporates the client ID in the contents file before the contents file is played back; and when the play back software plays back the contents file, it compares the client ID incorporated therein with the client ID incorporated in the contents file and plays back the contents file only when both the client IDs agree with each other.

Both the play back software and the contents file may incorporate user IDs, in addition to the client IDs, and the play back software may permit the play back of the contents file only when the client ID and user ID thereof agree with the client ID and user ID incorporated in the contents file, respectively.

Further, when the contents file is not played back, the recording medium may display a function such as a clock, or the like other than the contents file; and when a cursor is put on the display of the function, the display may be changed to a display in a mode which is different depending upon whether or not a particular contents file is down loaded.

In working places, it may be desired that the play back

of a contents file is not aware of by other persons. It cannot be aware of by the other persons that the contents file is started up when other function such as a watch, or the like is displayed in a state in which the contents file is started up but is not displayed. Further, whether or not a contents file is present can be confirmed only by checking the change of a display when a cursor is put thereon.

Brief Description of the Drawings

FIG. 1 is a view showing a network to which the present invention is applied; FIG. 2 is a flowchart showing a setup sequence of play back software; FIG. 3 is a conceptual view showing an arrangement of a contents file; FIG. 4 is a view showing examples of the icon of the play back software; FIG. 5 is a view showing an example of the icon when a contents file is played back; and FIG. 6 shows time charts showing contents played back from a contents file.

Best Mode of Carrying Out the Invention

With reference to FIG. 1, reference numeral 1 denotes a server to which to a plurality of terminal computers 3 are connected through the Internet communication network 2. Play back software is installed on the respective terminal computers 3. The play back software is recorded on a recoding medium 4 such as a CDROM, a DVD, and the like which is distributed as a supplement, or the

to step 2 and input the user ID and profile data again. Whereas, when the user succeeds to get the certification, the user ID and the profile data are automatically transmitted to the server 1. When the server 1 receives the user ID and the profile data, it transmits a client ID inherent (unique) to the terminal computer 3 from which the data was transmitted, and the terminal computer 3 receives the client ID (S5). The play back software installed on the terminal computer 3 having received the client ID incorporates the client ID and the user ID in the play back software at the predetermined sections thereof (S6), thereby the setup is completed.

In contrast, the user, who is not a registered member, inputs only profile data (S7) because he or she is not provided with a user ID. Thus, the terminal computer 3 automatically transmits the profile data to the server 1 (S8) and receives a client ID from the server 1 (S9). Then, the user incorporates the received client ID in the play back software installed on the terminal computer 3 having received the client ID (S10), thereby the setup is completed.

Note that the play back software is programmed such that all the jobs, which are subsequent to the query whether or not member registration is performed (S1), the request for input of user ID and client ID (S2 and S7) and the input of user ID and client ID (S2 and S7), are executed automatically. Thus, when the play back software is installed on the terminal computer 3,

- 10 -

the jobs up to the completion of setup is automatically carried out.

When the setup is completed as described above, it is possible for the user to access the server 1 from the terminal computer 3, to download a desired contents file from the various kinds of the contents files stored in the server 1, and to play back it through the play back software. However, the contents files include the pay contents files the play back of which is permitted only to members and the free contents files the play back of which is permitted also to persons other than the members.

Each contents file has a structure conceptually shown in FIG. 5. That is, each contents file has an incorporating section 51 in which a flag is incorporated which indicates whether the contents file is pay or free, an incorporating section 52 in which an user ID is incorporated, and an incorporating section 53 in which a client ID is incorporated, and these sections are preset in the file. No data is incorporated in the user ID incorporating section 52 and in the client ID incorporating section 53 at the time each contents file is stored in the server 1, while the flag for indicating whether it is pay or free is incorporated in the incorporating section 51. Note that contents main data is incorporated in a section 54 other than these incorporating sections.

When a user downloads a free contents file, the play back software incorporates the client ID of the user, which was

Then, a predetermined enjoyable or relaxing moving picture and music are played back for a predetermined period of time.

When the contents to be played back take 45 seconds in their entirety, a commercial message of 15 seconds may be sandwiched between the front section of the contents and the rear section thereof each taking 15 seconds, as shown in FIG. 6(a). Alternately, a commercial message of 15 seconds may be played back after the main section of the contents is played back for 30 seconds, as shown in FIG. 6(b). Incidentally, if the server 1 reads the client ID on the terminal computer 3 side first at the time the daily contents file is down loaded to the terminal computer 3, it is possible to down load the contents of the daily contents file, which seem most suitable to the profile data corresponding to the client ID, referring to the profile data. A plurality of the daily contents files may be prepared, or the section of the commercial message may be replaced with other one. When it is found that a user is interested in, for example, a car, a previous commercial message may be replaced with a commercial message of a new car, and when the user is fond of tourism, it may be replaced with a commercial message of a travel agent.

When the daily contents file is played back, the play back software automatically deletes it after it has been played back. Note that an entertainment section other than a commercial message can be stored in the server 1 as a free or pay contents file, can be down loaded to the terminal computer 3, and can be played

